

EX PARTE OR LATE FILED

1101 Connecticut Ave. NW, Suite 910, Washington, D.C. 20036

April 15, 1999

Magalie R. Salas, Esquire Secretary Federal Communications Commission 445 Twelfth Street, S.W. TW-A325 Washington, DC 20554

Re:

1998 Biennial Regulatory Review -- Amendment of Part 18 of the Commission's Rules to Update Regulations for RF Lighting Devices, ET Docket No 98-42

Dear Ms. Salas:

This is to inform you that pursuant to Section 1.1206 of the Commission's rules, Nokia Inc. ("Nokia") submitted the attached written *ex parte* filing in the above-captioned proceeding. Pursuant to Section 1.1206, two copies of the filing are enclosed. If you should have any questions, please do not hesitate to contact the undersigned at (202) 887-5330.

Sincerely.

\_eo R. Fitzsimon

Director

Regulatory and Industry Affairs

Enclosures (2)

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CONNECTING PEOPLE

1101 Connecticut Ave. NW, Suite 910, Washington, D.C. 20036

April 15, 1999

Dale Hatfield Chief, Office of Engineering and Technology Federal Communications Commission 2000 M Street, N.W., Suite 400 Washington, DC 20004

Re:

1998 Biennial Regulatory Review -- Amendment of Part 18 of the

Commission's Rules to Update Regulations for RF Lighting Devices, ET

Docket No 98-42

Dear Mr. Hatfield:

Pursuant to Section 1.1206 of the Commission's rules, Nokia Inc. ("Nokia") hereby submits this written *ex parte* filing in the above-captioned proceeding. Two copies of this filing have been provided to the Commission's Secretary's office under separate cover.

Nokia is a global telecommunications company providing equipment for mobile/wireless communications in 130 countries. U.S. sales of Nokia Mobile Phones have contributed to the distinction of Nokia being the number one supplier of mobile phones worldwide. As a strategic region for developing new services and products, the U.S. is of vital importance to Nokia's business. Included in Nokia's product portfolio are devices operating under F.C.C. Part 15 rules for providing low power wireless communications in the 2.400 – 2.4835 GHz Industry, Science and Medicine (ISM) band.

Based upon analysis conducted at Nokia Research Center and reports offered to the IEEE 802 by other members, we have concluded that the rule change for microwave lighting devices proposed in the above-captioned proceeding will seriously impact the performance of devices operating under Part 15 Spread Spectrum Rules. If RF lighting devices are allowed to transmit in the ISM band under Part 18 rules, Part 15 devices will encounter a substantial rise in the background interference with a reduction in range and performance. Two variables impact the extent to which RF lighting will impact Part 15 devices. First, the number of RF Lighting devices within proximity of a Part 15 device. Second, the amount of radiated energy RF Lighting devices are allowed to emit.

It is Nokia's opinion that limits should be placed upon the peak energy RF Lighting devices can emit in the 2.400 – 2.4835 GHz band. While Nokia commends the Commission for proposing such limits in the Notice of Proposed Rulemaking in this proceeding, Nokia does not believe that the Commission's proposed limits are sufficient to protect Part 15 devices from harmful interference. As a result, Nokia proposes that a 5 MHz portion of the ISM band be reserved for higher powered emissions from RF lighting

devices. It is further proposed that this band be located at 2478.5 - 2483.5 MHz. RF Lighting devices shall be restricted as follows:

Region I: 2400 - 2478.5 MHz. This portion of the band has a limit of 60

dBuV/m @ 3 m, which is consistent with Part 15 Class A limits

Region II: 2478.5 - 2483.5 MHz. RF lighting emission limit in this region

should be limited to 100 dBuV/m @ 10 m (equivalent to 330 mV/m

@ 3m).

Region III: 2483.5 - 2500 MHz. Emissions limited to same level as Region I.

In summary, Nokia views the 2.400 – 2.4835 GHz ISM band as an important means for providing wireless communications. The proposed rule change to allow RF Lighting to emit based upon Part 18 rules will negatively impact an installed base of approximately 6 million Part 15 radios and negatively impact future business opportunities for Part 15 devices. By imposing the limits as described above, the business interests of both RF Lighting and Part 15 radios can be allow to advance. If you should have any questions, please do not hesitate to contact the undersigned at (972) 894-5000.

Respectfully Submitted,

Steven D. Gray, Ph.D.

**Principal Scientist** 

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Cc:

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